REMARKS

The Office Action mailed August 10, 2007 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1, 4-6, 9-11, 14-16, and 19 are pending in this application. Claims 1, 3-6, 8-11, 13-16, 18 and 19 stand rejected. Claims 2-3, 7-8, 12-13, and 17-18 have been canceled.

The rejection of Claims 1, 3-6, 8-11, 13-16, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Maguire et al. (U.S. Patent No. 5,331,579)("Maguire") in view of Kruger et al. (U.S. Patent App. No. 2003/0063702 A1)("Kruger") and Chow et al. (U.S. Patent App. No. 2003/0083827)("Chow") is respectfully traversed.

Maguire describes a modeling system that arranges a model in a hierarchical structure wherein various modules are executed independently of one another. More specifically, Maguire describes a modeling system wherein a supervisor (50) initiates a plant object (54) that independently initiates various other objects, such as objects (56 and 58). Each object (56 and 58) initiates its own model module and error check module and then proceeds to initiate its own objects, such as objects (60 and 62). Each object (60 and 62) initiates its own error check module and model module, and also initiates various additional objects. The modeling system enables each module in the system to be executed as an independent process, such that various modules are independently executed throughout the system. Notably, Maguire does not describe nor suggest a modular method of modeling a power plant that includes running one module at a time and passing the results from one module to the next module in succession.

Kruger describes a system for evaluating and maintaining proper noble metal loading during a noble metal application process. The system includes opening a workbook application for running the modeling program installed on a computer (202), inputting simulation parameters (204), running a set-up macro to produce a text file of the various input and geometric parameters (208), and launching the modeling program for performing the computations and analysis (210). Notably, Kruger does not describe nor suggest a modular

method of modeling a power plant that includes running one module at a time and passing the results from one module to the next module in succession.

Chow describes an automated system (100) for use in performing an integrated analysis on a gas turbine power plant. The system (100) includes an aerodynamic module (101), a performance module (102), a secondary flow module (103), a heat transfer module (104), a component life module (105), and a bottoming cycle module (106). Initially, the aerodynamic module (101) and the performance module (102) are executed until an agreement is reached on specific parameters. Once the aerodynamic module (101) and the performance module (102) reach agreement on those specific parameters, their results are sent to the secondary flow module (103) for analysis. Upon completion of its analysis, the secondary flow module (103) transfers the results back to both the aerodynamic module (101) and the performance module (102) to enable modules (101 and 102) to update their analytical models. Once the performance module (102), the aerodynamic module (101), and the secondary flow module (103) are in agreement, the data is distributed to various other analysis modules (104, 105, and 106) for independent analysis by each module (104, 105, and 106). Notably, Chow does not describe nor suggest a modular method of modeling a power plant that includes running one module at a time and passing the results from one module to the next module in succession.

Claim 1 recites a modular method of modeling a power plant comprising "selecting a major component module model from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique configuration . . . inputting initial model information into a database for the selected modules by inputting the initial model information into a spread sheet associated with each selected module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes . . . running the modular model by running each selected module and enabling data exchange between the selected modules, wherein running each selected module comprises running the selected modules successively one module at a time and passing the results from

one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed . . . generating a result that indicates the performance of the major components of the power plant."

No combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant as is recited in Claim 1. More specifically, no combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant that includes running modules successively one module at a time and passing the results from one module to the next module in succession. Rather, in contrast to the present invention, Maguire describes a modeling system that uses a hierarchical structure wherein various modules are executed independently throughout the system, Kruger describes a modeling system that includes running a modeling program on a computer, and running a set-up macro that has been created to produce a text file of the various input and geometric parameters, and Chow describes an automated system for use in performing an integrated analysis on a gas turbine power plant, wherein data is sent from one module to multiple other modules. Accordingly, Claim 1 is submitted to be patentable over Maguire in view of Kruger and Chow.

Claims 3-5 depend from independent Claim 1. Claim 3 has been canceled. When the recitations of Claims 4 and 5 are considered in combination with the recitations of Claim 1, Applicant respectfully submits that dependent Claims 4 and 5 likewise are patentable over Maguire in view of Kruger and Chow.

Claim 6 recites a modular method of modeling a power plant having a plurality of components, the method comprising "selecting at least two component module models from a library of component modules, each component module representing a power plant component of a unique configuration . . . inputting initial model information into a database for the selected modules by inputting initial model information into a spread sheet associated with each selected module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes . . . running the modular model by running each selected module and exchanging data between the

selected modules, wherein running each selected module comprises running the selected modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed . . . and generating a result that indicates the performance of the major components of the power plant."

No combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant as is recited in Claim 6. More specifically, no combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant that includes running modules successively one module at a time and passing the results from one module to the next module in succession. Rather, in contrast to the present invention, Maguire describes a modeling system that uses a hierarchical structure wherein various modules are executed independently throughout the system, Kruger describes a modeling system that includes running a modeling program on a computer, and running a set-up macro that has been created to produce a text file of the various input and geometric parameters, and Chow describes an automated system for use in performing an integrated analysis on a gas turbine power plant, wherein data is sent from one module to multiple other modules. Accordingly, Claim 6 is submitted to be patentable over Maguire in view of Kruger and Chow.

Claims 8-10 depend from independent Claim 6. Claim 8 has been canceled. When the recitations of Claims 9 and 10 are considered in combination with the recitations of Claim 6, Applicant respectfully submits that dependent Claims 9 and 10 likewise are patentable over Maguire in view of Kruger and Chow.

Claim 11 recites a modular method of modeling a power plant, the power plant comprising a plurality of major components including at least one of a gas turbine, a heat recovery steam generator, a steam turbine, and a condenser/cooling tower, said method comprising "creating a power plant model by selecting a major component module model from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique

configuration . . . linking the selected modules together to enable data exchange between modules . . . inputting initial model information into a database for the selected modules by inputting initial model information into a spread sheet associated with each selected module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes . . . running the modular model by running each selected module and exchanging data between the selected modules, wherein running each selected module comprises running the selected modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed . . . and generating a result that indicates the performance of the major components of the power plant."

No combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant as is recited in Claim 11. More specifically, no combination of Maguire, Kruger, and Chow describes nor suggests a modular method of modeling a power plant that includes running modules successively one module at a time and passing the results from one module to the next module in succession. Rather, in contrast to the present invention, Maguire describes a modeling system that uses a hierarchical structure wherein various modules are executed independently throughout the system, Kruger describes a modeling system that includes running a modeling program on a computer, and running a set-up macro that has been created to produce a text file of the various input and geometric parameters, and Chow describes an automated system for use in performing an integrated analysis on a gas turbine power plant, wherein data is sent from one module to multiple other modules. Accordingly, Claim 11 is submitted to be patentable over Maguire in view of Kruger and Chow.

Claims 13-15 depend from independent Claim 11. Claim 13 has been canceled. When the recitations of Claims 14 and 15 are considered in combination with the recitations of Claim 11, Applicant respectfully submits that dependent Claims 14 and 15 likewise are patentable over Maguire in view of Kruger and Chow.

Claim 16 recites a power plant modular modeling system comprising a database operationally coupled to a computer, said database comprising a library of power plant major component module models, each major component module representing a power plant major component of a unique configuration, said computer configured to "create a power plant model by selecting a major component module model from the library of component module models for each major component of the power plant . . . link the selected modules together to enable data exchange between modules . . . receive initial model information from a user for the selected modules, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes . . . store the initial model information in a spread sheet associated with each selected module . . . and run the modular model by running each selected module including exchanging data between the selected modules, wherein running each selected module comprises running the selected modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed."

No combination of Maguire, Kruger, and Chow describes nor suggests a power plant modular modeling system as is recited in Claim 16. More specifically, no combination of Maguire, Kruger, and Chow describes nor suggests a power plant modular modeling system that is configured to run the modular model by running modules successively one module at a time and passing the results from one module to the next module in succession. Rather, in contrast to the present invention, Maguire describes a modeling system that uses a hierarchical structure wherein various modules are executed independently throughout the system, Kruger describes a modeling system that includes running a modeling program on a computer, and running a set-up macro that has been created to produce a text file of the various input and geometric parameters, and Chow describes an automated system for use in performing an integrated analysis on a gas turbine power plant, wherein data is sent from one module to multiple other modules. Accordingly, Claim 16 is submitted to be patentable over Maguire in view of Kruger and Chow.

Claims 18 and 19 depend from independent Claim 16. Claim 18 has been canceled. When the recitations of Claim 19 are considered in combination with the recitations of Claim 16, Applicant respectfully submits that dependent Claim 19 likewise is patentable over Maguire in view of Kruger and Chow.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. See U.S. v. Adams, 148 U.S.P.Q. 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 U.S.P.Q. 2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Applicant respectfully submits that Maguire and Chow each teach away from the present invention, and as such, each supports the nonobviousness of the present invention. More specifically, Maguire describes a modeling system wherein various modules are independently executed throughout the system, and Chow describes an automated system wherein data is sent from one module to multiple other modules. In contrast to the present invention, neither Maguire nor Chow describes nor suggests running selected modules successively one module at a time and passing the results from one module to the next module in succession. As such, the presently pending claims are patentably distinguishable from the cited combination.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 1, 3-6, 8-11, 13-16, 18 and 19 be withdrawn.

In view of the foregoing amendments and remarks, all of the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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